



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): May et al.
Serial No.: 10/652,134
Filing Date: 8/29/2003

Examiner: Daniel H. Pan
Group Art Unit: 2185
Atty Docket No.: CML00770D

Title: Dataflow Graph Compression for Power Reduction in a Vector Processor

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

The undersigned submits herewith patents, publications or other information (enclosed herewith and/or listed on the enclosed list of references form) of which he or she is aware, which he or she believes is relevant and may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR §1.56. The order of listing of the references on the attached form and any appendix hereto is without regard for relative relevance to the present invention.

This Information Disclosure Statement is submitted:

- ☐ under 37 CFR §1.97(a), or
(Accompanies the new patent application submitted herewith.)
- ☐ under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last.)
- ☒ under 37 CFR 1.97(c) together with either a:
☐ Statement under 37 CFR 1.97(e), or
☒ a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first.)
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☐ Statement under 37 CFR 1.97(e), and
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee.)
- ☒ Applicant(s) submit herewith Form PTO 1449-Information Disclosure Citation together with required copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.
- ☐ PRIOR APPLICATIONS References identified with an asterisk (*) in the enclosed PTO Form 1449, were disclosed in prior Patent Application No. , filed , now U.S. Patent No. , and, as such, copies thereof are not included pursuant to the provisions of 37 CFR 1.98(d).

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☐ **FOREIGN LANGUAGE DOCUMENTS** A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56(c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on Form PTO 1449 and is enclosed herewith.

☒ **FEE AUTHORIZATION**

Please see enclosed Credit Card Payment Form. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account 50-0375 pursuant to 37 CFR 1.25.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR §1.56, this statement does not constitute an admission that any patent, publication or other information referred to therein is "prior art" or "material" to this invention or any application for patent for this invention.

In accordance with 37 CFR §1.97, the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that other information that may be material as defined in 37 CFR §1.56 exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR §1.97 and §1.98 and MPEP §609. In addition, the Examiner is requested to conduct a thorough independent search in order to bring the best references available forward in this application.

It is requested that the information disclosed herein be made of record in this application.

Express Mail #

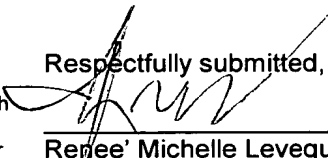
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Date of Deposit: May 2, 2006

Typed Name: Paula Barton

Signature: 

Respectfully submitted,


Renée' Michelle Leveque
Attorney/Agent for Applicant(s)
Reg. No. 36,193
Date: May 2, 2006
Telephone No.: 301-668-3073



PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
		Application Number	10/652,134		
		Filing Date	3/29/2003		
		First Named Inventor	May et al.		
		Art Unit	2185		
		Examiner Name	Daniel H. Pan		
		Attorney Docket Number	CML00770D		
Sheet	1	of	2		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		3,718,912	Feb-73	Hasbrouck et al.	
		4,128,880	Dec-78	Cray Jr.	
		4,744,043	May-88	Kloker	
		4,760,545	Jul-88	Inagami et al.	
		4,807,183	Feb-89	Kung et al.	
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		5,390,352	Feb-95	Kinoshita	
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		5,881,257	Mar-99	Glass et al.	
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		5,936,953	Aug-99	Simmons	
		5,966,528	Oct-99	Wilkinson et al.	
		5,969,975	Oct-99	Glass et al.	
		5,999,736	Dec-99	Gupta et al.	
		6,052,766	Apr-00	Betker et al.	
		6,064,819	May-00	Franssen et al.	
		6,128,775	Oct-00	Chow et al.	
		6,192,384	Feb-01	Daily et al.	
		6,437,804	Aug-02	Ibe et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
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³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.
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		Number - Kind Code ² (if known)			
		5,697,788	Dec-97	Ohta	
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		5,719,998	Feb-98	Ku et al.	
		5,764,787	Jun-98	Nickerson	
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		20030128712	Jul-03	Moriwaki et al.	
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		20040117595	Jun-04	Norris	
		20050053012	Mar-05	Moyer	
		20050055534	Mar-05	Moyer	
		20050055543	Mar-05	Moyer	
		US-			

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		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				

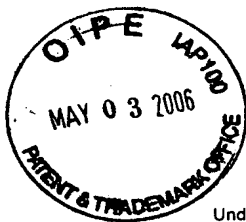
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Substitute for form 1449B/PTO		Complete if Known			
		Application Number	10/652,134		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	3/29/2003		
		First Named Inventor	May et al.		
		Art Unit	2185		
		Examiner Name	Daniel H. Pan		
Sheet	1	of	1	Attorney Docket Number	CML00770D

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		LAM, M., Software Pipelining: An Effective Scheduling Technique for VLIW Machines, Proceedings of the SIGPLAN '88 Conference on Programming Language Design and Implementation, Atlanta, Georgia, June 22-24, 1988, pp. 318-328	
		LEE, T. et al., A Transformation-Based Method for Loop Folding, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, Vol. 13, No. 4, April 1994, pp. 439-450	
		KAVI, K.M. et al., A Formal Definition of Data Flow Graph Models, IEEE Transactions on Computers, Vol C-35, No. 11, Nov 1986, pp. 940-948	
		COOPER, K.D. et al., Efficient Computation of Flow Insensitive Interprocedural Summary Information, SIGPLAN Notices, Vol. 19, No. 6, June 1984, pp. 247-258	
		STRONG, H.R., Vector Execution of Flow Graphs, Journal of the Association for Computing Machinery, Vol 39, No. 1, January 1983, pp. 186-196	
		AIKEN, A. et al., Resource-Constrained Software Pipelining, IEEE Transactions on Parallel and Distributed Systems, Vol. 6, No. 12, December 1995, pp. 1248-1270	
		WULF, WILLIAM A. "Evaluation of the WM Architecture." Proceedings of the 19 th Annual International Symposium on Computer Architecture: 1992, pp. 382-390, ACM 0-89791-509-7/92/0005/0382.	
		TALLA, D., Architectural techniques to Accelerate Multimedia Applications on General-Purpose Processors, Dissertation, August 2001, pp. 94-125	
		TALLA, D., Bottlenecks in Multimedia Processing with SIMD Style Extensions and Architectural Enhancements, IEEE Transactions of Computers, August 2003, pp. 1015-1031, Vol. 62, No. 8, IEEE	

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